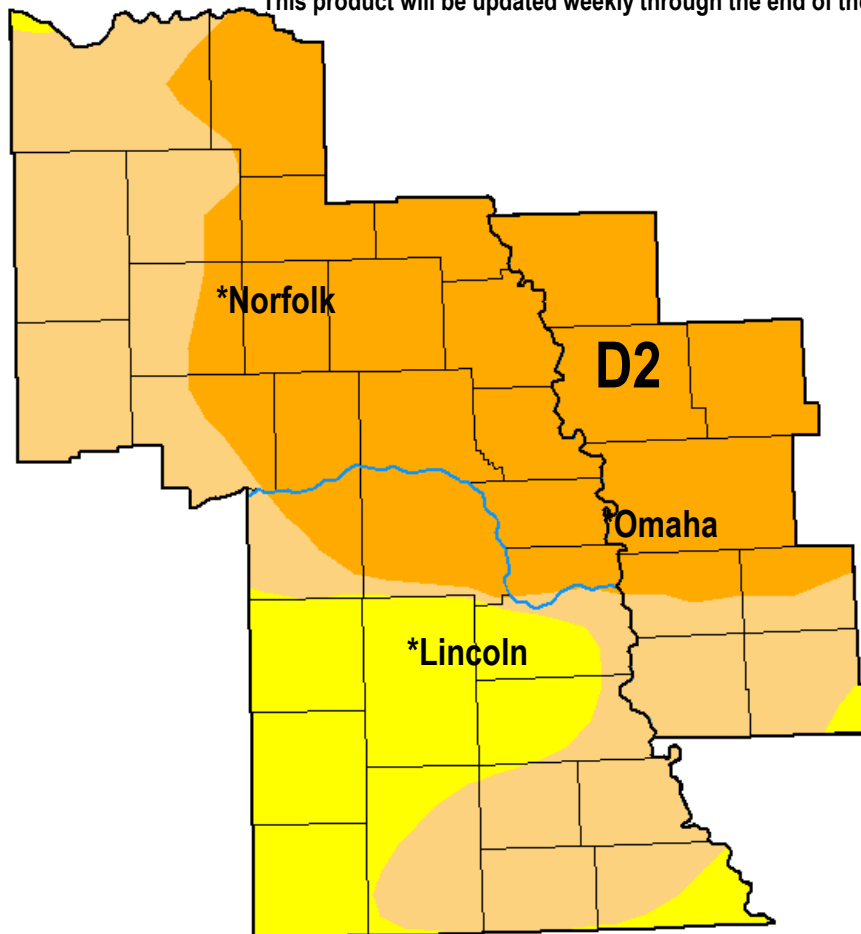


Severe to Extreme Drought in Parts of Eastern NE and Western IA

*This product will be updated weekly through the end of the growing season.



Abnormally Dry (D0):

Going into drought, short-term dryness, rangeland conditions decline.

Moderate Drought (D1):

Some damage to crops and pastures, surface water levels decline, grasses brown.

Severe Drought (D2):

Crop yields are low, ethanol production decreases, plants begin to close, roadside haying begins, well levels dropping.

Extreme Drought (D3):

Hay is scarce and expensive, producers are selling cattle early, drought tolerant trees dying, water temperatures are high, groundwater use increases.

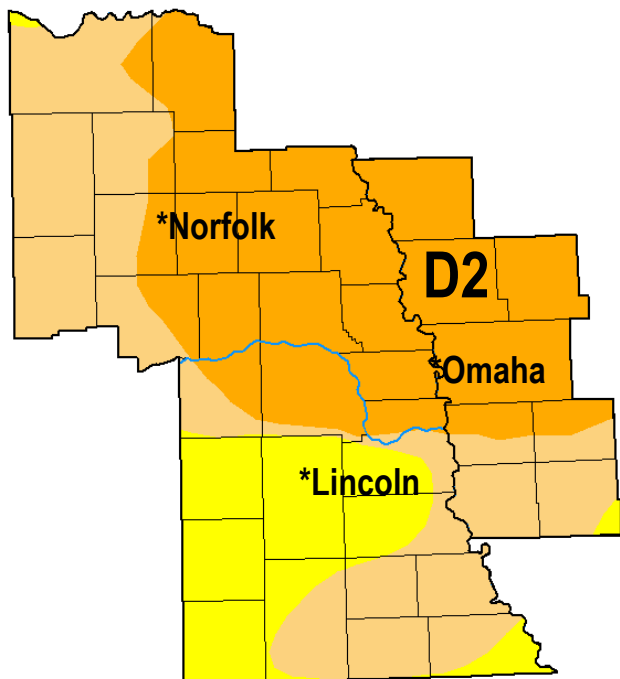


Synopsis:

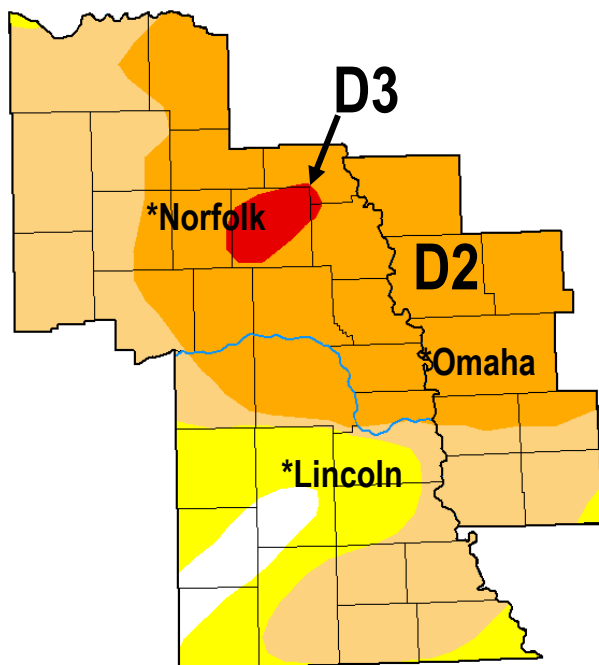
- Rainfall of 0.50-1.00" last week helped to improve extreme drought conditions that were previously in Cuming County.
- Severe drought conditions remain over much of northeast Nebraska and western Iowa.

Two Week Comparison:

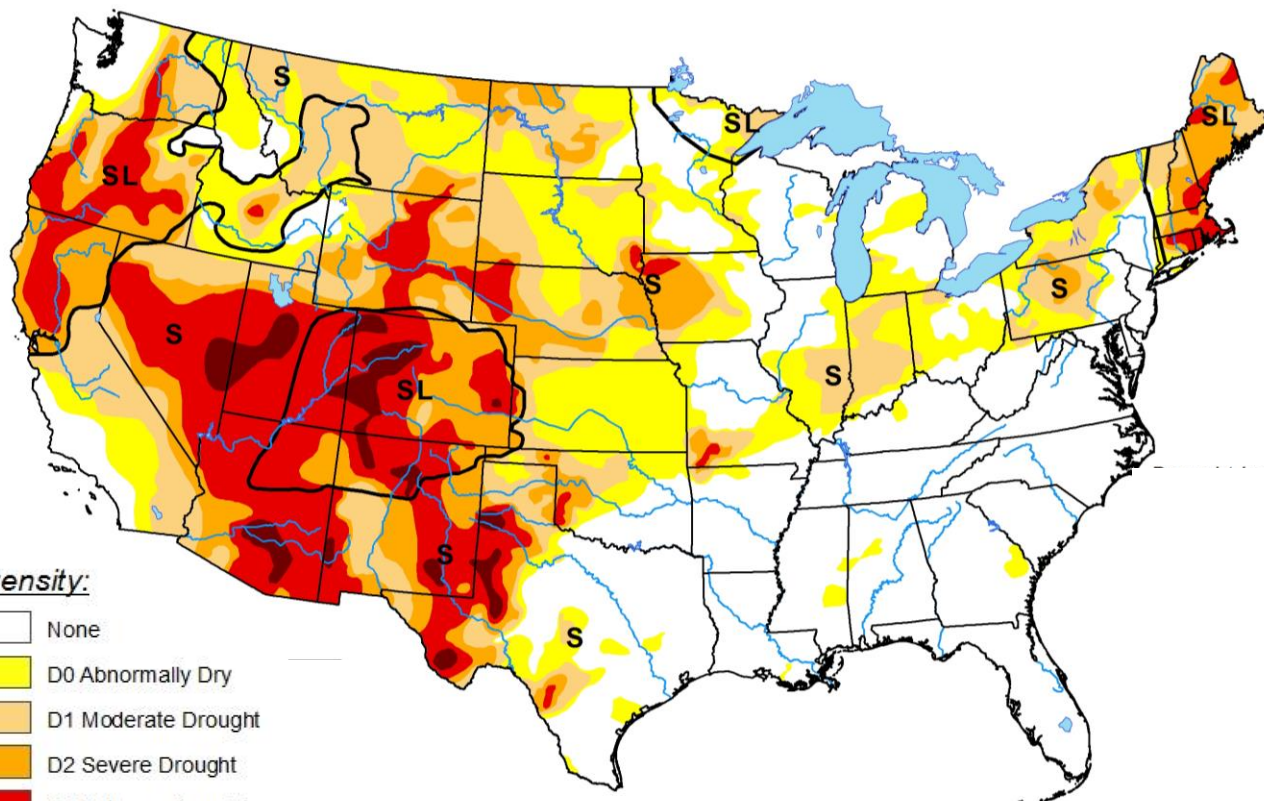
October 13th



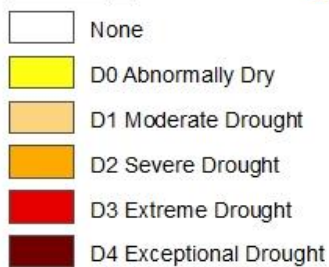
October 6th



US Drought Monitor



Intensity:



Local & State Actions:

Many counties have authorized emergency haying and grazing use of Conservation Reserve Program (CRP). This included 42 counties in Nebraska and 52 counties in Iowa.

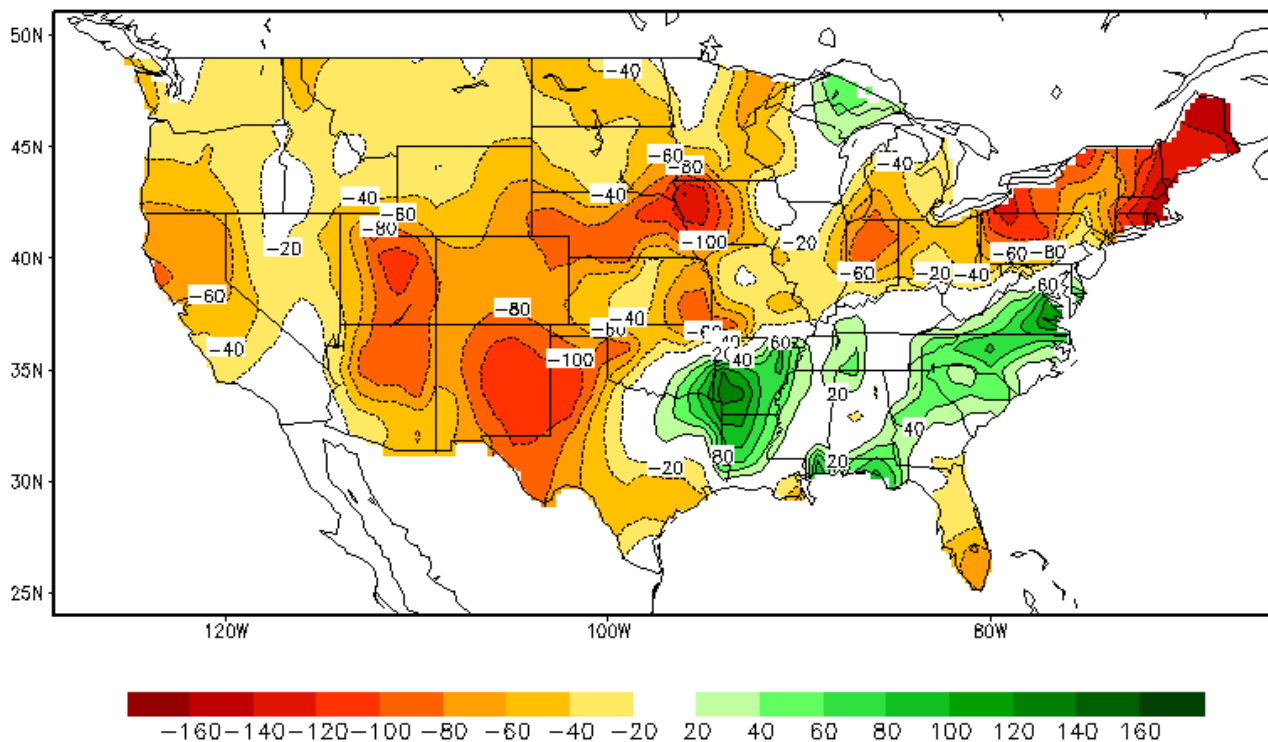
Additional information concerning the drought can be obtained via the

Additional information at Department of Natural Resources : <https://dnr.nebraska.gov/index>

Additional information about federal disaster declarations due to the drought and drought assistance information can be found at the farm service agency web site at: www.fsa.usda.gov

Soil Moisture Conditions:

Calculated Soil Moisture Anomaly (mm)
OCT 14, 2020



Nebraska - *Topsoil* moisture was rated as 46% short and 27% very short.
Subsoil moisture was rated as 41% short and 23% very short.

Iowa - *Topsoil* moisture was rated as 34% short and 17% very short.
Subsoil moisture was rated as 37% short and 21% very short.

More info at **NWS Climate Prediction Center (CPC)**:

http://www.cpc.ncep.noaa.gov/products/Soilmst_Monitoring/US/Soilmst/Soilmst.shtml

Agricultural Impacts:

Nebraska - As of October 11th

Corn: 14% poor or very poor

Soybean: 43% ahead of average

Sorghum: 14% poor or very poor

Winter wheat: 1% behind average

Oats: not available

Pasture: 38% poor or very poor

Iowa - As of October 13th

Corn: 26% poor or very poor

Soybean: 2 weeks ahead of ave.

Hay: not available

Oats: not available

Pasture: 42% poor or very poor

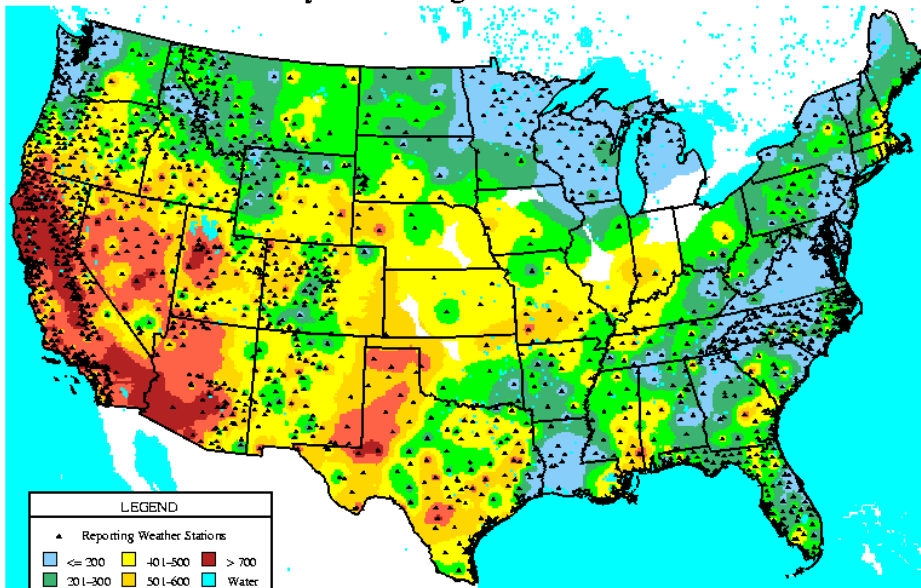
More info at the **United States Department of Agriculture (USDA) National Agricultural Statistics Service NASS:**
https://www.nass.usda.gov/Statistics_by_State/index.php

Water Restrictions:

None known

Fire Danger:

Keetch-Byram Drought Index: 14-Oct-20



WFAS-MAPS Graphics FIRE BEHAVIOR RESEARCH MISSOULA, MT

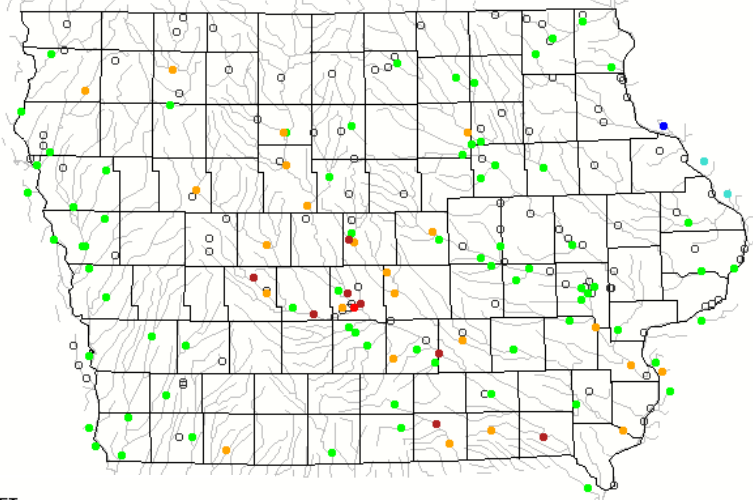


KBDI Value	Description of Fire Potential
0-200	Low - Wet with little danger of fire initiation
201-300	Moderate - Drying occurring with some fire danger
301-400	
401-500	High - Ground cover dry and will burn readily
501-600	
601-700	Extreme - Dead and live fuels will burn readily
>700	

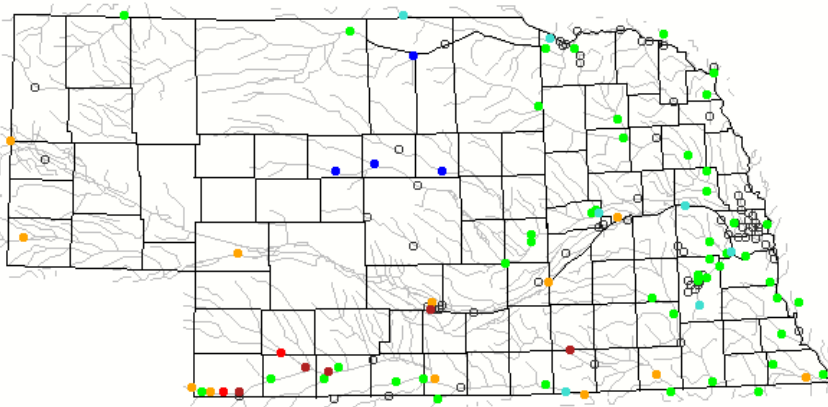
<http://www.wfas.net/images/firedanger/kbdi.png>

River and Streamflow Conditions:

Thursday, October 15, 2020 11:30ET



Thursday, October 15, 2020 11:30ET



Explanation - Percentile classes

Low	<10 Much below normal	10-24 Below normal	25-75 Normal	76-90 Above normal	>90 Much above normal	High	Not-ranked

-A majority of the river gauges across eastern Nebraska and western Iowa indicate near normal streamflow for this time of year

Hourly and forecast river stages out to 90 days can be found at the **National Weather Service's (NWS) Advanced Hydrologic Prediction Service (AHPS)** web page:

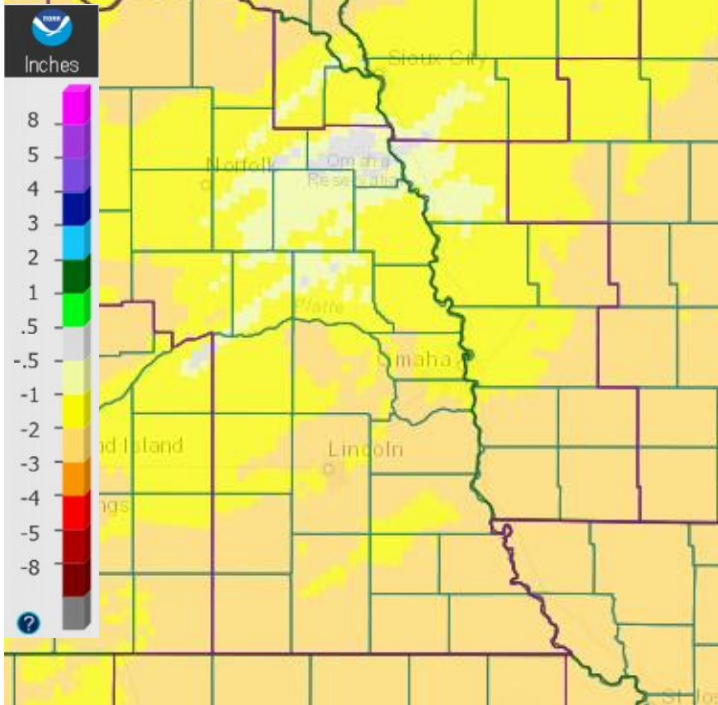
<https://water.weather.gov/ahps2/index.php?wfo=oax>

Additional Current stream and river stages may be viewed at the following **USGS Web Site**:

<http://waterwatch.usgs.gov/>

Local Climatology:

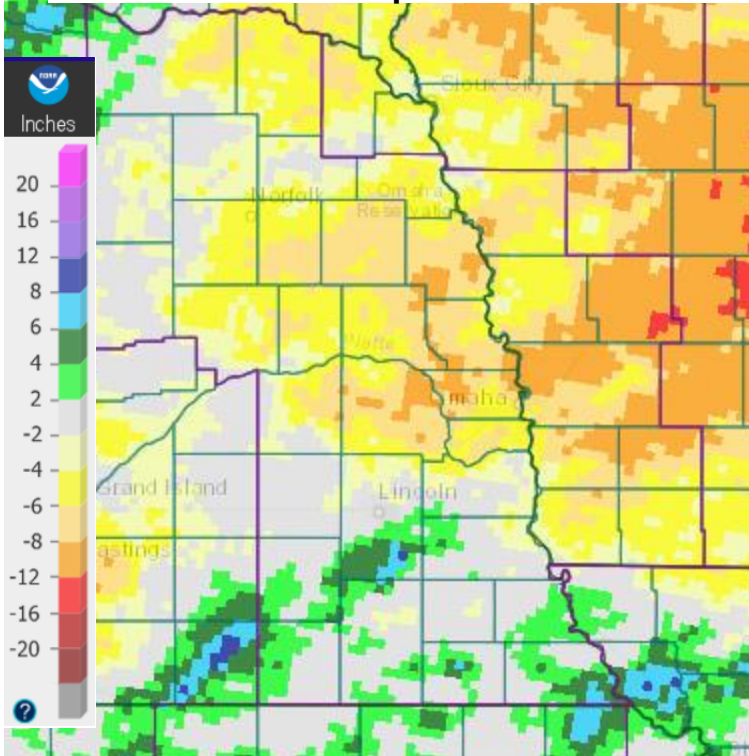
30 Day Rainfall Departure from Normal



30 Day

- 1 to 3 inches below normal across most of eastern Nebraska and western Iowa

6 Month Rainfall Departure from Normal

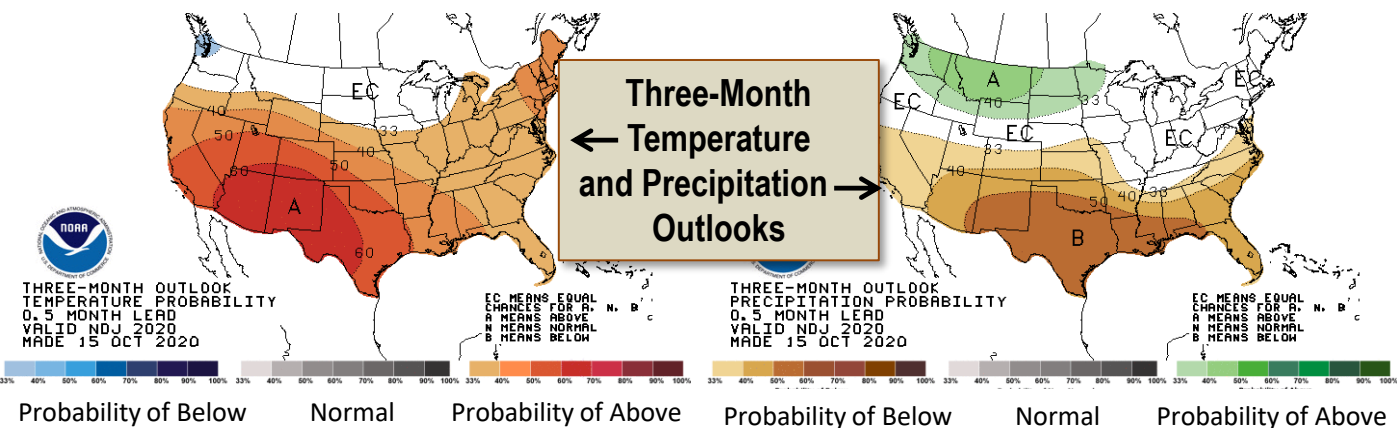
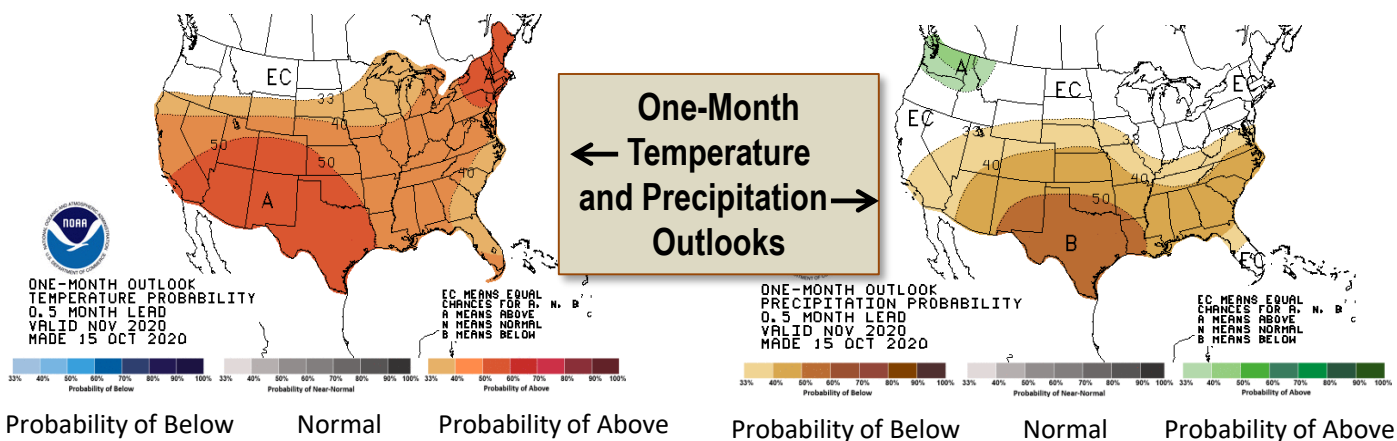
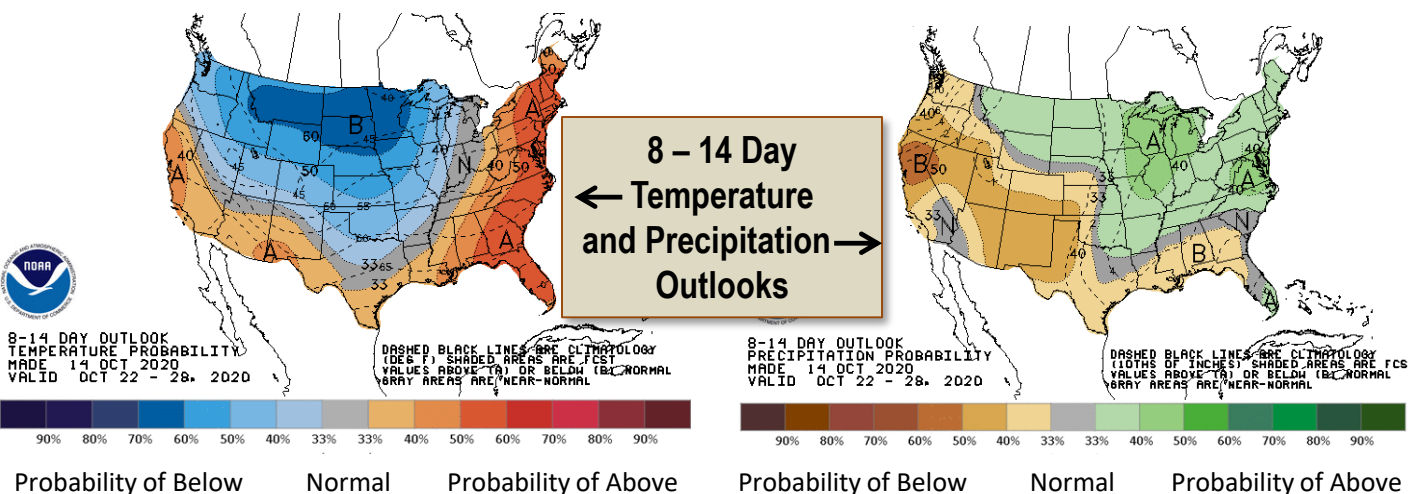


6 Month

- 2 to 6 inches above normal in portions of far southeast Nebraska
- 4 to 12 inches below normal in east-central Nebraska and western Iowa
- 12+ inches below normal in parts of central and western Iowa

Precipitation & Temperature Outlooks:

For the end of October, the odds favor below normal temperatures and equal chances of above or below normal precipitation for much of our area.



Questions and/or Comments:

If you have any questions or comments about the information in this document please contact:

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402-472-6711
<https://nsco.unl.edu/>

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Justin Glisan, Ph.D.
Iowa Department of Agriculture and Land
Stewardship
Tel: 515-281-8981

Acknowledgements:

The drought monitor is a multi-agency effort involving NOAA's National Weather Service and National Climatic Data Center, the USDA, state and regional center climatologists and the National Drought Mitigation Center. Information for this statement has been gathered from NWS and FAA observation sites, cooperative and volunteer observations, USDAFS, the USDA and USGS.

Related Websites:

NWS - <http://www.weather.gov/oax>
CPC -

<http://www.cpc.ncep.noaa.gov/products/Drought/>

Drought Monitor:

<http://droughtmonitor.unl.edu/>

<https://www.drought.gov/drought/>

USGS - <http://water.usgs.gov/>

COE - <http://www.nwo.usace.army.mil/>